

PATENT**REMARKS**

In the Office Action, the Examiner rejected claims 13-25 under 35 U.S.C. §103(a). This rejection is fully traversed below.

Claims 13, 16 and 22 have been amended to further clarify the subject matter regarded as the invention. Claims 13-25 remain pending. Reconsideration of the application is respectfully requested.

REJECTION OF CLAIMS 13-25 UNDER 35 USC 103(a)

In the Office Action, the Examiner rejected claims 13, 14, 16-18 and 20 under 35 USC 103(a) as being unpatentable over Breed et al., U.S. Patent Pub. No. 2001/0038698 A1, in view of Wang, U.S. Patent No. 6,484,040 B1; rejected claim 15 under 35 USC 103(a) as being unpatentable over Breed et al. in view of Wang and further in view of Kondo et al., U.S. Patent No. 4,292,679; rejected claim 19 under 35 USC 103(a) as being unpatentable over Breed et al. in view of Wang and further in view of Colmenarez et al., U.S. Patent No. 6,498,970 B2; rejected claim 21 under 35 USC 103(a) as being unpatentable over Breed et al. in view of Wang and further in view of Brain (How Stuff Works – USB, Oct. 11, 2003); rejected claims 22 and 23 under 35 USC 103(a) as being unpatentable over Breed et al. in view of Johnson et al., U.S. Patent No. 6,279,946, and further in view of Grady, U.S. Patent No. 6,591,085 B1; and rejected claims 24 and 25 under 35 USC 103(a) as being unpatentable over Breed et al. in view of Johnson et al. and further in view of Grady and further in view of Zlotnick, U.S. Patent Pub. No. 2004/0114772. Applicants respectfully disagree.

Claim 13

Claim 13 pertains to a peripheral apparatus for an electronic device, where the electronic device is a personal, hand-held wireless communication device. Further, the peripheral apparatus for the personal wireless

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communication device includes a directional speaker that provides ultrasonic sound output, and a controller operatively connected to the directional speaker. The controller operates to supply signals to the directional speaker so that the ultrasonic sound is output by the directional speaker. Still further, claim 13 recites:

wherein the electronic device is a personal, hand-held wireless communication device, and said peripheral apparatus is configured to be removeably connected to the personal, hand-held wireless communication device,

wherein said peripheral apparatus is portable and able to be hand-held, and

wherein while said peripheral apparatus is connected to the personal, hand-held wireless communication system, the personal, hand-held wireless communication device with said peripheral apparatus remain portable and hand-held.

In contrast, in Breed et al. the speakers in Breed et al. are not part of a hand-held audio output device. Instead, the speakers are associated with a vehicle. Fig. 5A, for example, illustrates sound generating units 281, 282, 283 and 284 internal to the vehicle and used by entertainment system 280 of the vehicle. E.g., para. [0132]. As such, Breed et al. fails to teach or suggest the electronic device of claim 1 which is a personal, hand-held wireless communication device. Although not clear from the Office Action, it appears that the Examiner also asserts that the in-vehicle speakers (e.g., sound generating units 281-284) pertain to the peripheral apparatus. This, however, cannot be. According to claim 13, the peripheral device is "portable and able to be hand-held...." Surely, the vehicle with its integrated speakers disclosed in Breed et al. are neither portable nor able to be hand-held.

In view of admitted deficiencies of Breed et al., the Examiner combined Wang with Breed et al. The Examiner asserts that the mobile telephone in Wang can connect to car speakers of Breed et al. Even assuming there is adequate motivation to combine Breed et al. with Wang as proposed by the Examiner, the car speaker would not be portable or able to be hand-held. Moreover, as quoted

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above, claim 1 also recites that "while said peripheral apparatus is connected to the personal, hand-held wireless communication system, the personal, hand-held wireless communication device with said peripheral apparatus remain portable and hand-held." Hence, even if the mobile telephone in Wang were able to be connected to the vehicle entertainment system of Breed et al. having in-vehicle sound generating units (speakers), the vehicle still would not be portable or able to be hand-held.

Accordingly, it is submitted that Breed et al. in view of Wang fails to teach or suggest the peripheral apparatus recited in claim 13. Also, claims 14 and 15 depend from claim 13 and are, therefore, patentably distinct from Breed et al. in view of Wang for at least the same reasons.

Claim 16

Claim 16 pertains to a peripheral device for a hand-held computing device. The peripheral device is itself a hand-held device and includes a housing with a directional speaker and a controller. The directional speaker is configured to provide ultrasonic sound output in a particular direction, wherein the ultrasonic sound output by the directional speaker can result in audio sound in the particular direction for a user of said computing device. The controller is connected to the directional speaker and operates to supply signals to the directional speaker so that the ultrasonic sound is output by the directional speaker. The peripheral device can also include "a port connector configured to assist with coupling said peripheral device to the computing device so that said computing device can drive said directional speaker to produce the audio sound."

In contrast, the in-vehicle audio system or the vehicle itself are not peripheral devices for a hand-held computing device. Although those skilled in the art would clearly not consider the vehicle or its in-vehicle entertainment system in Breed et al to be a "peripheral" device, claim 16 has been clarified for the benefit of the Examiner to state that the peripheral device is also a hand-held device. As a consequence, the dashboard of a vehicle cannot serve to teach or

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suggest a housing for a peripheral device that is a hand-held device. Hence, it is submitted that Breed et al. does not teach or suggest a hand-held peripheral device that includes a directional speaker and a controller. Nor can the vehicle or the in-vehicle audio system in Breed et al. Although the Examiner points to paragraph [0144] of Breed et al. as allegedly teaching a directional speaker, this portion of Breed et al. is far from being clear. The paragraph refers to "directional speaker" yet references FIG. 10 whose ultrasonic transducers 231, 232 and 233 determine the location of the driver's head and control the pointing direction of the microphone 355. The speaker 357 shown in FIG. 10 is connected to the phone system 359 and does not seem to be able to produce ultrasonic sound output which results in audio sound in a particular direction of a user sitting in the vehicle. Even if Wang were to be combined with Breed et al, Wang would not be able to overcome the deficiencies of Wang noted above.

Therefore, it is submitted that Breed et al. in view of Wang, fails to teach or suggest the peripheral apparatus recited in claim 16. Also, claims 17-21 depend from claim 16 and are, therefore, patentably distinct from Breed et al. in view of Wang for at least the same reasons.

Claim 22

Claim 22 pertains to a method for automatically selecting one of a plurality of potential speakers integral with a hand-held audio output device, where at least one of the speakers is directional while at least one other of the speakers is substantially non-directional. Among other things, claim 22 recites: "obtaining a piece of information pertaining to the audio output device" and "determining whether the appropriate one or more of the potential speakers are to be directional, substantially non-directional or both based on the piece of information." Furthermore, claim 22 indicates that these potential speakers are integral with the hand-held audio output device,

In contrast, Breed et al. does not provide any selection between directional and/or substantially non-directional speakers, let alone based on a

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piece of information as recited in claim 22. Further, the speakers in Breed et al. are also not integral with a hand-held audio output device.

The Examiner agrees that Breed et al. fails to teach the use of directional and substantially non-directional speaker or a method to control which speakers are in use. In view of the deficiencies of Breed et al., the Examiner again makes reference to col. 29, lines 19-35 of Johnson et al. However, there is nothing in column 29, lines 19-35 of Johnson et al. that teaches or suggests anything to overcome the deficiencies of Breed et al. In Johnson et al. there is no teaching to provide both direction and substantially non-directional speakers whether in or out of a vehicle. There is a merely casual reference to possible use of a hypersonic sound system at col. 29, lines 33-35 and a reference to a speaker 357 at col. 29, lines 41-42. Clearly, Johnson et al. offers no teaching or suggestion for use of both a directional speaker and a substantially non-directional speaker together in a vehicle. Even, for the sake of discussion, assuming that directional and substantially non-directional speakers were to be used together, there is no teaching or suggestion in Johnson et al. for any means or need to determine "whether the appropriate one or more of the potential speakers are to be directional, substantially non-directional or both based on the piece of information" as recited in claim 22. Still further, Johnson et al. does not teach or suggest that its in-vehicle system can be in any way associated with a hand-held audio output device.

In addition, the Examiner cites Grady for an MP3 player. However, there is neither motivation nor any reasonable basis to combine Grady, a portable media player, with the in-vehicle systems of Breed et al. and Johnson et al. which rely on seat occupancy to direct microphone pickup. There is no basis for a MP3 player to consider seat occupancy as it has no seats. Moreover, if the MP3 player of Grady were combine with Breed et al and Johnson et al., the MP3 player would become attached to the vehicle and thus non-portable or no longer able to be hand-held.

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Therefore, it is submitted that Breed et al. in view of Johnson et al. and Grady fail to teach or suggest not only the use of both directional and non-directional speakers but also the speaker selection by the apparatus and the speakers being integral with a hand-held audio output device as recited in claim 22. Also, claims 23-25 depend from claim 22 and are, therefore, patentably distinct from Breed et al., Johnson et al. and/or Grady for at least the same reasons. Additionally, dependent claims 23-25 recite additional limitations that are not taught or suggested by Breed et al., Johnson et al. and/or Grady.

SUMMARY

It is submitted that all claims are patentably distinct from the cited references. Reconsideration of the application and an early Notice of Allowance are earnestly solicited.

If there are any issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned representative at the telephone number listed below.

Respectfully submitted,

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